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BRINKS HOFER GILSON & LIONE/PML  
PO BOX 10395  
CHICAGO, IL 60610

EXAMINER

WACHSMAN, HAL D

ART UNIT PAPER NUMBER

2857

DATE MAILED: 02/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

CT

<b>Office Action Summary</b>	Application No. 10/613,410	Applicant(s) HART, RONALD G.	
	Examiner Hal D. Wachsman	Art Unit 2857	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 November 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-42 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 November 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

1. The Replacement drawing sheets filed 11-12-04 are objected to because these sheets are numbered with respect to the sheet numbering as 1-63 however in the drawings filed 5-28-04 the drawing sheets were numbered 1-207. In addition, there was no replacement figure for Figure 30A. There was however a Figure 23A found in these replacement drawings but there was no Figure 23A in the drawings filed 5-28-04 and there is no reference to a Figure 23A in the Brief Description of the Drawings. This Figure 23A though appears to contain the same material as the original Figure 30A thus there is a possibility that this figure was labeled with the wrong figure number. Appropriate correction is required.

2. The substitute specification filed 11-12-04 is objected to under 37 C.F.R. 1.52 because there are tables (see for example Table A on pages 28-34) with lines that do not have sufficient space between the lines (specification must have lines that are 1 1/2 or double spaced). Appropriate correction is required.

3. Paragraph 6 of the prior Office action indicated that the listing of references in the specification was not a proper information disclosure statement however there was no comments on this in the Remarks section of the reply filed 11-12-04. Appropriate explanation is required.

4. The Examiner respectfully notes what appears to be some grammatical errors in the claims:

Claim 1, part (a) states "A device for..." ("A" should be small "a");

Claim 27, line 3, cites "I<sup>2</sup>T" (the "2" is not a superscript i.e. originally had the current squared here);

Claim 38, line 4, a period is missing at the end of the claim here.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

6. Claims 1, 2, 4, 13-18, 20, 23-25, 29, 31-33, 36-38, 40 and 42 are rejected under 35 U.S.C. 102(e) as being anticipated by McRae (5,859,596).

As per claim 1, McRae (Abstract, col. 3 lines 50-60) discloses "A device for monitoring and reporting at least one parameter of an electric circuit..".

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McRae (Abstract, col. 3 lines 54-63, col. 5 lines 24-27) discloses "at least one sensor coupled with said electric circuit....and generate at least one analog signal indicative thereof". McRae (figure 3 - block 70, col. 5 lines 18-27) discloses "an analog to digital converter coupled with said at least one sensor...to at least one digital signal representative of said at least one analog signal". McRae (Abstract, figure 3 – block 46, col. 5 lines 21-27, 45-50) discloses "a processor coupled with said analog to digital converter...to generate at least one computed value from said at least one digital signal". McRae (col. 4 lines 31-36) discloses "a local display coupled with said processor and operative to report said at least one computed value". McRae (Abstract, figure 3 – block 47, col. 4 lines 15-19, 36-39) discloses "a communications port coupled with said processor and a digital network...of said at least one computed value onto said digital network". McRae (Abstract, figure 6 (summing of phase acquired data), col. 11 lines 57-60, col. 12 lines 9, 10, 41) discloses "wherein the system further comprises: ...a summing module coupled with said digital network...and further sum said at least one computed value to a second value".

As per claim 2, McRae (col. 3 lines 54-57, col. 5 lines 25-31) discloses the feature of this claim.

As per claim 4, McRae (col. 4 lines 31-43) discloses the feature of this claim.

As per claim 13, McRae (see at least abstract) discloses the feature of this claim.

As per claim 14, McRae (see at least abstract) discloses the feature of this claim.

As per claim 15, McRae (col. 11 lines 57-60) discloses the feature of this claim.

As per claim 16, McRae (Abstract, col. 3 lines 59-63) discloses the feature of this claim.

As per claim 17, McRae (Abstract, col. 3, lines 64-67 (bi-directional communications between the components enabling connections between the devices)) discloses the feature of this claim.

As per claim 18, McRae (col. 3 lines 59-61, col. 4 lines 32-41) discloses the feature of this claim.

As per claim 20, McRae (Abstract, figure 3 blocks 46 and 47) discloses the feature of this claim.

As per claim 23, McRae (Abstract, col. 4 lines 32-41) discloses the feature of this claim.

As per claim 24, McRae (Abstract, figure 3 blocks 46 and 47, col. 4 lines 32-41) discloses the feature of this claim.

As per claim 25, McRae (see at least abstract) discloses the feature of this claim.

As per claim 29, McRae (Abstract, col. 5 lines 50-53) discloses the feature of this claim.

As per claim 31, McRae (Abstract, col. 5 lines 50-53) discloses the feature of this claim.

As per claim 32, McRae (see at least abstract (every monitoring device has a communications port)) discloses the feature of this claim.

As per claim 33, McRae (see at least abstract) discloses the feature of this claim.

As per claim 36, McRae (Abstract, col. 3 lines 64-67) discloses the feature of this claim.

As per claim 37, McRae (see at least abstract) discloses the feature of this claim.

As per claim 38, McRae (Abstract, col. 4 lines 32-43) discloses the feature of this claim.

As per claim 40, McRae (see at least abstract) discloses the feature of this claim.

As per claim 42, McRae (Abstract, figure 6 (summing of phase acquired data), col. 11 lines 57-60, col. 12 lines 9, 10, 41) discloses the feature of this claim.

### ***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over McRae (5,859,596) in view of Chow (5,453,903).

As per claim 3, Chow (figure 1 – blocks 114 and 116) teaches first and second analog to digital converters with the A/D converter in block 116 converting a voltage analog signal to at least one digital sample and the A/D converter in block 114 converting a current analog signal to at least one digital sample. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to apply the techniques of Chow to the invention of McRae as specified above because it would enable the parallel sampling and follow-up processing of voltage and current on each of the phases which would improve the processing speed for obtaining the desired computed values.

9. Claims 5-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over McRae (5,859,596) in view of "Global Positioning System Applications at the Bonneville Power Administration" (Street et al.).

As per claim 5, Street et al. (page 247, section 5.1) teach the feature of this claim. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to apply the techniques of Street et al. to the invention of McRae as specified above because as taught by Street et al. (page 245, section 3) precise time derived by a GPS timing receiver facilitates accurately time tagging power system events such as fault transient arrival time or power frequency zero-crossing times.



As per claim 6, Street et al. (page 247, section 5.1) teach the feature of this claim. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to apply the techniques of Street et al. to the invention of McRae as specified above because as taught by Street et al. (page 245, section 3) precise time derived by a GPS timing receiver facilitates accurately time tagging power system events such as fault transient arrival time or power frequency zero-crossing times.

As per claim 7, Street et al. (pages 244-245, section 3, page 246, section 4.2) teach the feature of this claim. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to apply the techniques of Street et al. to the invention of McRae as specified above because as taught by Street et al. (page 247, section 5.1) the use of GPS provides precise synchronization with UTC time allowing accurate phase angle determination over a geographical area of any size.

As per claim 8, Street et al. (pages 244-245, section 3, page 245, see figure 2) teach the feature of this claim. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to apply the techniques of Street et al. to the invention of McRae as specified above because as taught by Street et al. (page 245, section 3) precise time derived by a GPS timing receiver facilitates accurately time tagging power system events such as fault transient arrival time or power frequency zero-crossing times.

As per claim 9, Street et al. (pages 244-245, section 3, page 245, see figure 2) teach the feature of this claim. It would have been obvious to a person of

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ordinary skill in the art at the time the invention was made to apply the techniques of Street et al. to the invention of McRae as specified above because as taught by Street et al. (page 245, section 3) precise time derived by a GPS timing receiver facilitates accurately time tagging power system events such as fault transient arrival time or power frequency zero-crossing times.

As per claim 10, Street et al. (pages 244-245, section 3, page 247, section 5.1) teach the feature of this claim. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to apply the techniques of Street et al. to the invention of McRae as specified above because as taught by Street et al. (page 245, section 3) precise time derived by a GPS timing receiver facilitates accurately time tagging power system events such as fault transient arrival time or power frequency zero-crossing times.

As per claim 11, Street et al. (pages 244-245, section 3) teach the feature of this claim. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to apply the techniques of Street et al. to the invention of McRae as specified above because as taught by Street et al. (page 245, section 3) precise time derived by a GPS timing receiver facilitates accurately time tagging power system events such as fault transient arrival time or power frequency zero-crossing times.

10. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over McRae (5,859,596) in view of "Global Positioning System Applications at the Bonneville Power

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Administration" (Street et al.) as applied to claim 5 above, and further in view of Adamiak et al. (5,809,045).

As per claim 12, Adamiak et al. (col. 5 lines 45-67, col. 6 lines 1-9) teach the feature of this claim. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to apply the techniques of Adamiak et al. to the inventions of McRae and Street et al. as specified above because as taught by Adamiak et al. (col. 5 lines 45-47) data sampling can be synchronized to the power system frequency to eliminate the error effects of asynchronous sampling.

11. Claims 19, 30, 34 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over McRae (5,859,596) in view of the Applicant's Admissions of the prior art.

As per claim 19, the Applicant's Admissions of the prior art (page 14, paragraphs 0080, 0082 of the specification) teaches the feature of this claim. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to apply the Applicant's Admissions of the prior art to the invention of McRae as specified above because Ethernet is a notoriously well known local area network industry standard first developed by Xerox in 1976, with features such as 100 Mbit/s operation transmission speed making it desirable to use.

As per claim 30, the Applicant's Admissions of the prior art (page 14, paragraphs 0080, 0082 of the specification) teaches the feature of this claim. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to apply the Applicant's Admissions of the prior art to the invention of McRae as

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specified above because Ethernet is a notoriously well known local area network industry standard first developed by Xerox in 1976, with features such as 100 Mbit/s operation transmission speed making it desirable to use.

As per claim 34, the Applicant's Admissions of the prior art (page 14, paragraphs 0080, 0082 of the specification) teaches the feature of this claim. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to apply the Applicant's Admissions of the prior art to the invention of McRae as specified above because RS485 is an industry standard communications port that can be used for interfacing multiple devices to a shared bus with the capability of providing up to 32 transmitters and receivers networked on the same data line.

As per claim 35, McRae (see at least abstract) discloses the use of an RS232 port but does not clearly disclose the use of an RS485 port. However, the Applicant's Admissions of the prior art (page 14, paragraphs 0080, 0082 of the specification) teaches this excepted feature. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to apply the Applicant's Admissions of the prior art to the invention of McRae as specified above because RS485 is an industry standard communications port that can be used for interfacing multiple devices to a shared bus with the capability of providing up to 32 transmitters and receivers networked on the same data line.

12. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over McRae (5,859,596) in view of Murphy et al. (5,768,148).

As per claim 21, Murphy et al. (figure 3 – blocks 146 and 150, col. 2 lines 22-32) teach the feature of this claim. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to apply the techniques of Murphy et al. to the invention of McRae as specified above because as taught by Murphy et al. (col. 2 lines 22-28) the Ethernet TCP/IP protocol is a well known standard which would allow a user to use an existing LAN which would significantly reduce installation costs since much of the system wiring may already be in place.

13. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over McRae (5,859,596) in view of Multichannel Continuous Harmonic Analysis in Real-Time (Miller et al.).

As per claim 22, Miller et al. (page 1814 – An Overview of Chart and Remote Data Conversion Modules) teach the feature of this claim. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to apply the techniques of Miller et al. to the invention of McRae as specified above because fiber optics is compatible with power systems and is unaffected by electric fields.

14. Claims 26-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over McRae (5,859,596) in view of Demeyer (4,717,985).

As per claim 26, Demeyer (col. 4 lines 19-27) teaches the feature of this claim. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to apply the techniques of Demeyer to the invention of McRae as

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specified above because as taught by Demeyer (col. 4 lines 16-18) it would be of use in providing ground protection.

As per claim 27, Demeyer (Abstract, col. 4 lines 11-14, 21-25) teaches the feature of this claim. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to apply the techniques of Demeyer to the invention of McRae as specified above because as taught by Demeyer (col. 4 lines 16-18) it would be of use in providing ground protection.

As per claim 28, Demeyer (see at least abstract) teaches the feature of this claim. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to apply the techniques of Demeyer to the invention of McRae as specified above because as taught by Demeyer (col. 1 lines 9-13) the trip units comprising long delay and possibly short delay tripping functions can provide protection to an item of equipment, such as a motor which overheats when it is supplied by an overload current.

15. Claim 39 is rejected under 35 U.S.C. 103(a) as being unpatentable over McRae (5,859,596) in view of Tracy et al. (6,369,719).

As per claim 39, Tracy et al. (Abstract, figure 1, col. 2 lines 36-39, 55-60) teach the feature of this claim. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to apply the techniques of Tracy et al. to the invention of McRae as specified above because as taught by Tracy et al. (col. 1 lines 60-64) there was a need for a system that is capable of monitoring utility usage and other information on varying reading schedules and different levels of frequency of

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data interrogation (profiling), and is capable of wirelessly transmitting digital data to a desired remote device.

16. Claim 41 is rejected under 35 U.S.C. 103(a) as being unpatentable over McRae (5,589,596) in view of Adamiak et al. (5,809,045).

As per claim 41, Adamiak et al. (col. 4 lines 39, 40, 48-50, 58-61, col. 21 lines 66, 67, col. 22 lines 1-12) teach the feature of this claim. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to apply the techniques of Adamiak et al. to the invention of McRae as specified above because as taught by Adamiak et al. (col. 4 lines 48-50) a fault is indicated by the detection of a disturbance and by the sum of the current phasors falling outside of an elliptical restraint region.

17. The following references are cited as being art of additional general interest: Ehlers et al. (5,572,438) which disclose microcomputers that can communicate with each other and load control modules via a network/data bus utilizing a program with six *modules for energy management including the summing of energy consumption readings*, Montgomery et al. (6,401,081) which disclose the development of *modules* to be used for load survey, automatic meter reading, etc. and Ratner (5,684,826) which discloses a modem enabling multi-point networks to be established over power lines and that a *data network is a system of devices linked together so as to permit individual devices to exchange data with one or more other devices on the network*.

18. Applicant's arguments filed 11-12-04 have been fully considered but they are not persuasive. On page 14 of the reply the Applicant states:

"This application is a divisional of U.S. Pat. No. 6,694,270, which claims priority to U.S. Pat. No. 5,650,936, filed on December 30, 1994. Therefore, this application claims priority to December 30, 1994. As McRae was filed August 30, 1996 and issued January 12, 1999, Applicant submits that it is not prior art under 35 U.S.C...102."

However, the Related Applications section on page 1 of the substitute specification clearly states:

"This application is a continuation under 37 C.F.R. ...1.53(b) of U.S. Application Serial no. 10/068,431, filed February 6, 2002, now U.S. Pat. No. 6,694,270, incorporated by reference herein, which is a continuation under 37 C.F.R. 1.53(b) of U.S. Application Serial no. 08/798,723, filed **February 12, 1997**, abandoned, which is a **continuation-in-part** of U.S. Application Serial no. 08/369,849, filed December 30, 1994, now U.S. Pat. No. 5,650,936.....".

*A continuation-in-part application contains new matter that is not in the parent application* as is the situation when continuation-in-part application 08/798,723 is compared to the parent application of that case which is U.S. application serial no. 08/369,849 now U.S. patent no. 5,650,936. Thus, the filing date to be considered in this situation is not the 1994 filing date of U.S. patent no. 5,650,936 but rather **the filing date of the continuation-in-part application 08/798,723 which is February 12, 1997**. *The McRae reference has a filing date of August 30, 1996 which is before the February 12, 1997 filing date of the 08/798,723 CIP application* and thus McRae does indeed qualify as art under 35 U.S.C. 102(e). In addition, the Examiner respectfully notes that no arguments were presented in the Applicant's reply to clearly show where and why in



the 5,650,936 patent there is support for all the features now being claimed in this new continuation application.

On page 15 of the reply the Applicant argues that "McRae fails to disclose a summing module coupled with a digital network operative to receive at least one computed value and compute said computed value to a second value as claimed in claim 1." However, col. 11, lines 53 and 54, of McRae state "TRANSMITTER ROUTINE AND EVENT DATA BLOCK STRUCTURES" and then beneath that in lines 57-60, the reference states "the monitoring device 18 *computes* and stores averaged values of temperature and pressure, and the accumulated amp-hours for each phase since the last routine poll." Thus, "accumulated" means that a summation of amp-hours is being taken. In addition, the Examiner respectfully notes that a module can be a software module (i.e. software routine such as cited in this section of McRae). The Examiner respectfully submits that what is being argued here was notoriously well known in the prior art and additional evidence of this can be found in the Ehlers et al. (5,572,438) reference in column 4, lines 11-14, 23-25, 66, 67, col. 5 lines 1-3, col. 10 lines 46-67, col. 11 lines 1-52, col. 13 lines 7-11, 57-60, col. 27 lines 39, 40.

On page 16 of the reply the Applicant argues that "...neither Chow, Street nor Adamiak disclose such a summing module." However, it was the McRae reference that was used to disclose the summing module as described in claim 1. In addition, Adamiak et al. was applied in the rejection of claim 41 the claim stating "...wherein said summing module comprises a phasor summing module" however no separate arguments were presented with respect to the Adamiak reference and the phasor summing module

feature. With respect to the Applicant's arguments on page 17 with respect to the Applicant's Admissions of the prior art, the motivation to combine was clearly provided in the 35 U.S.C. 103 rejections of claims 19, 30, 34 and 35. On page 17 of the reply the Applicant states that Murphy, Miller or Demeyer do not disclose all of the limitations of the independent claim. However, these references were only used to teach dependent claim features. On this same page the Applicant argues that Tracy does not disclose such a summing module however Tracy was not used to teach a summing module. On page 18 of the reply the Applicant states that Adamiak does not disclose such a summing module as already noted above, Adamiak et al. was applied in the rejection of claim 41 the claim stating "...wherein said summing module comprises a phasor summing module" however no separate arguments were presented with respect to the Adamiak reference and the phasor summing module feature.

19. No claims are allowed.

**20. THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of


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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

21. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hal D. Wachsman whose telephone number is 571-272-2225. The examiner can normally be reached on Monday to Friday 7:00 A.M. to 4:30 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marc Hoff can be reached on 571-272-2216. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Hal D Wachsman  
Primary Examiner  
Art Unit 2857

HW  
February 10, 2005